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<110> Brodsky, Gary

<120> Product and Methods for Diagnosis and Therapy for Cardiac and Skeletal Muscle Disorders

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<150> 60/456,642
<151> 2003-03-18

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Val Arg Ser Leu Glu Thr Glu Asn Ala Gly Leu Arg Leu Arg Ile Thr
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Tyr Glu Ala Glu Leu Gly Asp Ala Arg Lys Thr Leu Asp Ser Val Ala
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Lys Glu Arg Ala Arg Leu Gln Leu Glu Leu Ser Lys Val Arg Glu Glu
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Ala Glu Asn Arg Leu Gln Thr Met Lys Glu Glu Leu Asp Phe Gln Lys
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Ile Trp Ala Ala Gly Ala Gly Ala Thr His Ser Pro Pro Thr Asp Leu
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Gly Pro Ile Ser Ser Gly Ser Ser Ala Ser Ser Val Thr Val Thr Arg
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Val Arg Ser Leu Glu Thr Glu Asn Ala Gly Leu Arg Leu Arg Ile Thr
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Glu Ser Glu Glu Val Val Ser Arg Glu Val Ser Gly Ile Lys Ala Ala
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Tyr Glu Ala Glu Leu Gly Asp Ala Arg Lys Thr Leu Asp Ser Val Ala
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Lys Glu Arg Ala Arg Leu Gln Leu Glu Leu Ser Lys Val Arg Glu Glu
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Phe Lys Glu Leu Lys Ala Arg Asn Thr Lys Lys Glu Gly Asp Leu Ile
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Gly Glu Ala Lys Lys Gln Leu Gln Asp Glu Met Leu Arg Arg Val Asp
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Ala Glu Asn Arg Leu Gln Thr Met Lys Glu Glu Leu Asp Phe Gln Lys
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cccagaactg cagcatcatg taatctggga cctgccaggc agggctgggg gcagaggcca 2160

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<211> 665
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<213> Mus musculus

<400> 9

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Ser Ser Thr Pro Leu Ser Pro Thr Arg Ile Thr Arg Leu Gln Glu Lys
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Glu Asp Leu Gln Glu Leu Asn Asp Arg Leu Ala Val Tyr Ile Asp Arg
35 40 45

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Val Arg Ser Leu Glu Thr Glu Asn Ala Gly Leu Arg Leu Arg Ile Thr
    50                  55                  60

Glu Ser Glu Glu Val Val Ser Arg Glu Val Ser Gly Ile Lys Ala Ala
65                  70                  75                  80

Tyr Glu Ala Glu Leu Gly Asp Ala Arg Lys Thr Leu Asp Ser Val Ala
                85                  90                  95

Lys Glu Arg Ala Arg Leu Gln Leu Glu Leu Ser Lys Val Arg Glu Glu
            100                 105                 110

Phe Lys Glu Leu Lys Ala Arg Asn Thr Lys Lys Glu Gly Asp Leu Leu
        115                 120                 125

Ala Ala Gln Ala Arg Leu Lys Asp Leu Glu Ala Leu Leu Asn Ser Lys
    130                 135                 140

Glu Ala Ala Leu Ser Thr Ala Leu Ser Glu Lys Arg Thr Leu Glu Gly
145                 150                 155                 160

Glu Leu His Asp Leu Arg Gly Gln Val Ala Lys Leu Glu Ala Ala Leu
                165                 170                 175

Gly Glu Ala Lys Lys Gln Leu Gln Asp Glu Met Leu Arg Arg Val Asp
            180                 185                 190

Ala Glu Asn Arg Leu Gln Thr Leu Lys Glu Glu Leu Asp Phe Gln Lys
        195                 200                 205

Asn Ile Tyr Ser Glu Glu Leu Arg Glu Thr Lys Arg Arg His Glu Thr
    210                 215                 220

Arg Leu Val Glu Ile Asp Asn Gly Lys Gln Arg Glu Phe Glu Ser Arg
225                 230                 235                 240

Leu Ala Asp Ala Leu Gln Glu Leu Arg Ala Gln His Glu Asp Gln Val
                245                 250                 255

Glu Gln Tyr Lys Lys Glu Leu Glu Lys Thr Tyr Ser Ala Lys Leu Asp
            260                 265                 270

Asn Ala Arg Gln Ser Ala Glu Arg Asn Ser Asn Leu Val Gly Ala Ala
        275                 280                 285

His Glu Glu Leu Gln Gln Ser Arg Ile Arg Ile Asp Ser Leu Ser Ala
    290                 295                 300
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Gln Leu Ser Gln Leu Gln Lys Gln Leu Ala Ala Lys Glu Ala Lys Leu
305                 310                 315                 320

Arg Asp Leu Glu Asp Ser Leu Ala Arg Glu Arg Asp Thr Ser Arg Arg
                325                 330                 335

Leu Leu Ala Glu Lys Glu Arg Glu Met Ala Glu Met Arg Ala Arg Met
            340                 345                 350

Gln Gln Gln Leu Asp Glu Tyr Gln Glu Leu Leu Asp Ile Lys Leu Ala
        355                 360                 365

Leu Asp Met Glu Ile His Ala Tyr Arg Lys Leu Leu Glu Gly Glu Glu
    370                 375                 380

Glu Arg Leu Arg Leu Ser Pro Ser Pro Thr Ser Gln Arg Ser Arg Gly
385                 390                 395                 400

Arg Ala Ser Ser His Ser Ser Gln Ser Gln Gly Gly Gly Ser Val Thr
                405                 410                 415

Lys Lys Arg Lys Leu Glu Ser Ser Glu Ser Arg Ser Ser Phe Ser Gln
            420                 425                 430

His Ala Arg Thr Ser Gly Arg Val Ala Val Glu Glu Val Asp Glu Glu
        435                 440                 445

Gly Lys Phe Val Arg Leu Arg Asn Lys Ser Asn Glu Asp Gln Ser Met
    450                 455                 460

Gly Asn Trp Gln Ile Arg Arg Gln Asn Gly Asp Asp Pro Leu Met Thr
465                 470                 475                 480

Tyr Arg Phe Pro Pro Lys Phe Thr Leu Lys Ala Gly Gln Val Val Thr
                485                 490                 495

Ile Trp Ala Ser Gly Ala Gly Ala Thr His Ser Pro Pro Thr Asp Leu
            500                 505                 510

Val Trp Lys Ala Gln Asn Thr Trp Gly Cys Gly Ser Ser Leu Arg Thr
        515                 520                 525

Ala Leu Ile Asn Ser Thr Gly Glu Glu Val Ala Met Arg Lys Leu Val
    530                 535                 540

Arg Ser Leu Thr Met Val Glu Asp Asn Glu Asp Asp Asp Glu Asp Gly
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545 550 555 560

Glu Glu Leu Leu His His His Arg Gly Ser His Cys Ser Gly Ser Gly
565 570 575

Asp Pro Ala Glu Tyr Asn Leu Arg Ser Arg Thr Val Leu Cys Gly Thr
580 585 590

Cys Gly Gln Pro Ala Asp Lys Ala Ala Gly Gly Ala Gly Ala Gln Val
595 600 605

Gly Gly Ser Ile Ser Ser Gly Ser Ser Ala Ser Ser Val Thr Val Thr
610 615 620

Arg Ser Phe Arg Ser Val Gly Gly Ser Gly Gly Gly Ser Phe Gly Asp
625 630 635 640

Asn Leu Val Thr Arg Ser Tyr Leu Leu Gly Asn Ser Ser Pro Arg Ser
645 650 655

Gln Ser Ser Gln Asn Cys Ser Ile Met
660 665

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<211> 2388
<212> DNA
<213> Gallus gallus

<400> 10
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<211> 657
<212> PRT
<213> Gallus gallus

<400> 11

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Gly Thr Pro Leu Ser Pro Thr Arg Ile Thr Arg Leu Gln Glu Lys Glu
            20                  25                  30

Asp Leu Gln Glu Leu Asn Asp Arg Leu Ala Val Tyr Ile Asp Lys Val
        35                  40                  45

Arg Ser Leu Glu Leu Glu Asn Ala Gly Leu Arg Leu Arg Ile Thr Glu
    50                  55                  60

Ser Glu Glu Val Val Ser Arg Glu Val Ser Gly Ile Lys Ala Ala Tyr
65                  70                  75                  80

Glu Ala Glu Leu Ala Asp Ala Arg Lys Thr Leu Asp Ser Val Ala Lys
                85                  90                  95

Glu Arg Ala Arg Leu Gln Leu Glu Leu Ser Lys Val Arg Glu Glu His
            100                 105                 110

Lys Glu Leu Lys Ala Arg Asn Ala Lys Lys Glu Ala Asp Leu Leu Ala
        115                 120                 125

Ala Gln Ala Arg Leu Lys Asp Leu Glu Ala Leu Leu Asn Ser Lys Glu
    130                 135                 140

Ala Ala Leu Ser Thr Ala Leu Gly Glu Lys Arg Asn Leu Glu Asn Glu
145                 150                 155                 160

Val Arg Asp Leu Arg Ala Gln Val Ala Lys Leu Glu Gly Ala Leu Ser
                165                 170                 175

Glu Ala Lys Lys Gln Leu Gln Asp Glu Met Leu Arg Arg Val Asp Ala
            180                 185                 190

Glu Asn Arg Leu Gln Thr Leu Lys Glu Glu Leu Glu Phe Gln Lys Asn
        195                 200                 205

Ile Tyr Ser Glu Glu Leu Arg Glu Thr Lys Arg Arg His Glu Thr Arg
    210                 215                 220

Leu Val Glu Ile Asp Asn Gly Arg Gln Gln Glu Phe Glu Ser Lys Leu
225                 230                 235                 240

Ala Glu Ala Leu Gln Asp Leu Arg Arg Gln His Glu Asp Gln Ile Arg
                245                 250                 255
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His Tyr Arg Asp Glu Leu Glu Lys Thr Tyr Gly Ala Lys Leu Glu Asn
            260                 265                 270

Ala Lys Gln Ser Ala Glu Arg Asn Ser Ser Met Ala Gly Ala Ala His
        275                 280                 285

Glu Glu Leu Gln Gln Thr His Ile Arg Ile Asp Ser Leu Ser Ala Glu
    290                 295                 300

Leu Ser Gln Leu Gln Lys Gln Leu Ala Ala Lys Glu Ala Lys Leu Arg
305                 310                 315                 320

Glu Val Glu Glu Ala Leu Ser Arg Glu Arg Glu Gly Gly Arg Arg Leu
                325                 330                 335

Leu Ala Glu Lys Glu Arg Glu Met Ala Glu Met Arg Ala Arg Met Gln
            340                 345                 350

Gln Gln Leu Asp Glu Tyr Gln Glu Leu Leu Asp Ile Lys Leu Ala Leu
        355                 360                 365

Asp Met Glu Ile Asn Ala Tyr Arg Lys Leu Leu Glu Gly Glu Glu Glu
    370                 375                 380

Arg Leu Arg Leu Ser Pro Ser Pro Ser Ser Gln Arg Gly Ala Arg Ser
385                 390                 395                 400

Ser Gly Leu Gln His Ser Gly Ala Gly Ser Ala Lys Lys Arg Arg Leu
                405                 410                 415

Glu Asp Gly Glu Gly Arg Glu Gly Arg Glu Gly Arg Thr Ser Phe Ser
            420                 425                 430

His His Ala Arg Thr Ser Gly Arg Val Gly Val Glu Glu Val Asp Leu
        435                 440                 445

Glu Gly Arg Phe Val Arg Leu Arg Asn Lys Ser Asn Glu Asp Gln Ala
    450                 455                 460

Leu Gly Asn Trp Gln Val Lys Arg Gln Asn Gly Asp Asp Pro Pro Leu
465                 470                 475                 480

Thr Tyr Arg Phe Pro Pro Lys Phe Thr Leu Lys Ala Gly Gln Ala Val
                485                 490                 495

Thr Ile Trp Ala Ser Gly Ala Gly Ala Thr His Ser Pro Pro Ser Asp
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500 505 510

Val Val Trp Lys Ala Gln Ser Ser Trp Gly Ser Gly Asp Ser Leu Arg
515 520 525

Thr Ala Leu Ile Asn Ser Asn Gly Glu Glu Val Ala Met Arg Lys Leu
530 535 540

Val Arg Thr Val Ile Ile Asn Asp Asp Asp Glu Asp Glu Glu Asp Asp
545 550 555 560

Glu Val Ser Ile His His Arg His His His Ser Gly Cys Ser Gly Ser
565 570 575

Ala Asp Pro Ala Glu Tyr Asn Leu Arg Ser Arg Thr Val Leu Cys Gly
580 585 590

Thr Cys Gly Gln Pro Ala Asp Lys Gly Ser Ala Ala Ala Ala Ser Ser
595 600 605

Ala Ser Ser Ala Ser Thr Val Thr Val Ser Arg Gly Tyr Arg Ser Ser
610 615 620

Gly Gly Gly Ile Gly Glu Gly Leu Leu Gly Arg Ser Tyr Val Leu Gly
625 630 635 640

Gly Ala Gly Pro Arg Arg Gln Ala Pro Ala Pro Gln Gly Cys Ser Ile
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Met

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<211> 2111
<212> DNA
<213> Xenopus laevis

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aatcaccgag tctgaagacg tcatcagccg cgaggtcacg ggcatcaagt cagcgtatga 240

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<210> 13
<211> 665
<212> PRT

<213> Xenopus laevis

<400> 13

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Leu Ser Pro Thr Arg Ile Thr Arg Leu Gln Glu Lys Glu Asp Leu Gln
            20                  25                  30

Gly Leu Asn Asp Arg Leu Ala Val Tyr Ile Asp Lys Val Arg Ser Leu
        35                  40                  45

Glu Leu Glu Asn Ala Arg Leu Arg Leu Arg Ile Thr Glu Ser Glu Asp
    50                  55                  60

Val Ile Ser Arg Glu Val Thr Gly Ile Lys Ser Ala Tyr Glu Thr Glu
65                  70                  75                  80

Leu Ala Asp Ala Arg Lys Thr Leu Asp Ser Val Ala Lys Glu Arg Ala
                85                  90                  95

Arg Leu Gln Leu Glu Leu Ser Lys Ile Arg Glu Glu His Lys Glu Leu
            100                 105                 110

Lys Ala Arg Asn Ala Lys Lys Glu Ser Asp Leu Leu Thr Ala Gln Ala
        115                 120                 125

Arg Leu Lys Asp Leu Glu Ala Leu Leu Asn Ser Lys Asp Ala Ala Leu
    130                 135                 140

Thr Thr Ala Leu Gly Glu Lys Arg Asn Leu Glu Asn Glu Ile Arg Glu
145                 150                 155                 160

Leu Lys Ala His Ile Ala Lys Leu Glu Ala Ser Leu Ala Asp Thr Lys
                165                 170                 175

Lys Gln Leu Gln Asp Glu Met Leu Arg Arg Val Asp Thr Glu Asn Arg
            180                 185                 190

Asn Gln Thr Leu Lys Glu Glu Leu Glu Phe Gln Lys Ser Ile Tyr Asn
        195                 200                 205

Glu Glu Met Arg Glu Thr Lys Arg Arg His Glu Thr Arg Leu Val Glu
    210                 215                 220

Val Asp Asn Gly Arg Gln Arg Glu Phe Glu Ser Lys Leu Ala Asp Ala
225                 230                 235                 240
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Leu His Glu Leu Arg Ala Gln His Glu Gly Gln Ile Gly Leu Tyr Lys
                245                 250                 255

Glu Glu Leu Gly Lys Thr Tyr Asn Ala Lys Leu Glu Asn Ala Lys Gln
            260                 265                 270

Ser Ala Glu Arg Asn Ser Ser Leu Val Gly Glu Ala Gln Glu Glu Ile
        275                 280                 285

Gln Gln Ser Arg Ile Arg Ile Asp Ser Leu Ser Ala Gln Leu Ser Gln
    290                 295                 300

Leu Gln Lys Gln Leu Ala Ala Arg Glu Ala Lys Leu Arg Asp Leu Glu
305                 310                 315                 320

Asp Ala Tyr Ala Arg Glu Arg Asp Ser Ser Arg Arg Leu Leu Ala Asp
                325                 330                 335

Lys Asp Arg Glu Met Ala Glu Met Arg Ala Arg Met Gln Gln Gln Leu
            340                 345                 350

Asp Glu Tyr Gln Glu Leu Leu Asp Ile Lys Leu Ala Leu Asp Met Glu
        355                 360                 365

Ile Asn Ala Tyr Arg Lys Leu Leu Glu Gly Glu Glu Glu Arg Leu Arg
    370                 375                 380

Leu Ser Pro Ser Pro Asn Thr Gln Lys Arg Ser Ala Arg Thr Ile Ala
385                 390                 395                 400

Ser His Ser Gly Ala His Ile Ser Ser Ser Ala Ser Lys Arg Arg Arg
                405                 410                 415

Leu Glu Glu Gly Glu Ser Arg Ser Ser Ser Phe Thr Gln His Ala Arg
            420                 425                 430

Thr Thr Gly Lys Val Ser Val Glu Glu Val Asp Pro Glu Gly Lys Tyr
        435                 440                 445

Val Arg Leu Arg Asn Lys Ser Asn Glu Asp Gln Ser Leu Gly Asn Trp
    450                 455                 460

Gln Ile Lys Arg Gln Ile Gly Asp Glu Thr Pro Ile Val Tyr Lys Phe
465                 470                 475                 480

Pro Pro Arg Leu Thr Leu Lys Ala Gly Gln Thr Val Thr Ile Trp Ala
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485 490 495

Ser Gly Ala Gly Ala Thr Asn Ser Pro Pro Ser Asp Leu Val Trp Lys
500 505 510

Ala Gln Ser Ser Trp Gly Thr Gly Asp Ser Ile Arg Thr Ala Leu Leu
515 520 525

Thr Ser Ser Asn Glu Glu Val Ala Met Arg Lys Leu Val Arg Thr Val
530 535 540

Val Ile Asn Asp Glu Asp Asp Glu Asp Asn Asp Asp Met Glu His His
545 550 555 560

His His His His His His His His Asp Gly Gln Asn Ser Ser Gly Asp
565 570 575

Pro Gly Glu Tyr Asn Leu Arg Ser Arg Thr Ile Val Cys Thr Ser Cys
580 585 590

Gly Arg Pro Ala Glu Lys Ser Val Leu Ala Ser Gln Gly Ser Gly Leu
595 600 605

Val Thr Gly Ser Ser Gly Ser Ser Ser Ser Ser Val Thr Leu Thr Arg
610 615 620

Thr Tyr Arg Ser Thr Gly Gly Thr Ser Gly Gly Ser Gly Leu Gly Glu
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Ser Pro Val Thr Arg Asn Phe Ile Val Gly Asn Gly Gln Arg Ala Gln
645 650 655

Val Ala Pro Gln Asn Cys Ser Ile Met
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<211> 2078
<212> DNA
<213> Danio rerio

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<211> 659
<212> PRT
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<400> 15

Met Glu Thr Pro Gly Gln Lys Arg Ser Ser Arg Gly Gly Val Thr Asn
1 5 10 15

Val Leu Ser Pro Thr Arg Ile Ser Arg Leu Gln Glu Lys Glu Asp Leu
20 25 30

Ser Asn Leu Asn Asp Arg Leu Ala Val Tyr Ile Asp Lys Val Arg Ser
35 40 45

Leu Glu Val Glu Asn Ala Gly Leu Arg Met Arg Ile Thr Glu Ser Glu
50 55 60

Thr Glu Ile Ser Arg Glu Leu Ser Gly Met Lys Ala Ala Tyr Glu Ala
65 70 75 80

Glu Leu Ala Asp Ala Arg Lys Thr Leu Asp Ser Val Ala Lys Glu Arg
85 90 95

Ala Arg Leu Gln Leu Glu Leu Ser Lys Val Arg Glu Asp Tyr Lys Glu
100 105 110

Leu Lys Ala Arg Asn Gly Lys Lys Glu Ala Asp Leu Glu Ser Ala Leu
115 120 125

Ala Arg Leu Lys Asp Leu Glu Ser Leu Leu Asn Ser Lys Asp Ala Ser
130 135 140

Leu Ser Thr Ala Leu Gly Glu Lys Arg Thr Leu Glu Val Glu Val Arg
145 150 155 160

Asp Leu Lys Ala Gln Leu Ala Lys Leu Glu Gly Ser Leu Asn Asp Ala
165 170 175

Lys Lys Gln Leu Gln Asp Glu Met Leu Arg Arg Val Asp Ala Glu Asn
180 185 190

Arg Ile Gln Thr Leu Lys Glu Glu Leu Glu Phe Gln Lys Asn Ile Tyr
195 200 205

Ser Glu Glu Leu Arg Glu Ser Lys Arg Arg Tyr Glu Ser Arg Val Val
210 215 220

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Glu Ile Asp Ser Gly Arg Gln Gln Asp Tyr Glu Ser Lys Leu Ala Asp
225                 230                 235                 240

Ala Leu Thr Asp Leu Arg Asn Gln His Glu Glu Gln Leu Arg Ile Tyr
                245                 250                 255

Lys Glu Glu Ile Glu Lys Thr Tyr Asn Ser Lys Leu Glu Asn Ala Arg
            260                 265                 270

Ser Ser Ala Glu Arg Asn Ser His Leu Val Gly Ala Ala His Glu Glu
        275                 280                 285

Leu Gln Gln Thr Arg Val Arg Met Glu Gly Val Ser Ser Gln Leu Ser
    290                 295                 300

Gln Leu Gln Lys Gln Leu Ala Ala Arg Glu Ala Lys Ile Arg Glu Leu
305                 310                 315                 320

Glu Glu Ala Leu Ser Arg Glu Arg Asp Ile Leu Arg Arg Arg Leu Glu
                325                 330                 335

Asp Lys Glu Lys Glu Met Ala Glu Met Arg Gln Arg Met Gln Gln Gln
            340                 345                 350

Leu Asp Glu Tyr Gln Glu Leu Leu Asp Ile Lys Leu Ala Leu Asp Met
        355                 360                 365

Glu Ile Ser Ala Tyr Arg Lys Leu Leu Glu Gly Glu Glu Glu Arg Leu
    370                 375                 380

Arg Leu Ser Pro Ser Pro Pro Pro Ala Arg Gly Val Thr Val Thr Arg
385                 390                 395                 400

Ser Ser Gly Ser Gly Ser His Thr Arg Val Val Gln Ser Ser Thr Ser
                405                 410                 415

Arg Thr Ser Ser Gly Ser Ala Lys Lys Arg Arg Leu Asn Asp Asn Asp
            420                 425                 430

Ser Asp Ala Ser Ser Val Val Gly Gly Thr Val Thr Arg Thr Arg Ile
        435                 440                 445

Phe Gln Gln Ala Ser Ala Ser Gly Arg Val Thr Val Asp Glu Val Asp
    450                 455                 460

Leu Glu Gly Lys Phe Val Arg Leu Asn Asn Lys Ser Asp Gln Asp Gln
465                 470                 475                 480
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Ser Leu Gly His Trp Gln Val Lys Arg Gln Ile Gly Ser Gly Thr Pro
485 490 495

Ile Val Tyr Lys Phe Pro Pro Lys Phe Asn Leu Lys Ala Gly Gln Thr
500 505 510

Val Thr Ile Trp Ala Ala Gly Ala Gly Gly Thr His Ser Pro Pro Ser
515 520 525

Asp Leu Val Trp Lys Thr Gln Asn Ser Trp Gly Ser Gly Asp Leu Phe
530 535 540

Gln Thr Thr Leu Ile Ser Ser Ser Gly Glu Glu Met Ala Met Arg Lys
545 550 555 560

Val Thr Arg Thr Leu Phe Gln Asp Glu Glu Asp Asp Glu Met Ala Ala
565 570 575

His Ser Thr Cys Gly Asp Ser Glu Tyr Asn Leu Arg Ser Arg Thr Val
580 585 590

Leu Cys Gly Ser Cys Gly Gln Pro Ser Asp Arg Asn Ser Ser Cys Val
595 600 605

Ser Ala Ser Ser Gly Val Ser Ser Ala Ser Arg Ser Phe Ser Ser Gly
610 615 620

Gly Gly Gly Gly Leu Thr Glu Ala Phe Val Ser Pro Ser His Phe Ile
625 630 635 640

Val Ser Asn Asp Lys Pro Arg Gln Ala Gly Pro Lys Val Asp Asn Cys
645 650 655

Ser Ile Met

<210> 16
<211> 15
<212> PRT
<213> Mus musculus

<400> 16

Leu Leu Gly Asn Ser Ser Pro Arg Ser Gln Ser Ser Gln Asn Cys
1 5 10 15

<210> 17
<211> 17

<212> PRT
<213> Gallus gallus

<400> 17

Val Leu Gly Gly Ala Gly Pro Arg Arg Gln Ala Pro Ala Pro Gln Gly
1 5 10 15

Cys

<210> 18
<211> 15
<212> PRT
<213> Xenopus laevis

<400> 18

Ile Val Gly Asn Gly Gln Arg Ala Gln Val Ala Pro Gln Asn Cys
1 5 10 15

<210> 19
<211> 20
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<400> 19

Ile Val Ser Asn Asp Lys Pro Arg Gln Ala Gly Pro Lys Val Asp Asn
1 5 10 15

Cys Ser Ile Met
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<210> 20
<211> 18
<212> PRT
<213> Homo sapiens

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Leu Leu Gly Asn Ser Ser Pro Arg Thr Gln Ser Pro Gln Asn Cys Ser
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Ile Met

<210> 21
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<212> PRT
<213> Mus musculus

<400> 21

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1 5 10 15

Ile Met

<210> 22
<211> 20
<212> PRT
<213> Gallus gallus

<400> 22

Val Leu Gly Gly Ala Gly Pro Arg Arg Gln Ala Pro Ala Pro Gln Gly
1 5 10 15

Cys Ser Ile Met
20

<210> 23
<211> 18
<212> PRT
<213> Xenopus laevis

<400> 23

Ile Val Gly Asn Gly Gln Arg Ala Gln Val Ala Pro Gln Asn Cys Ser
1 5 10 15

Ile Met

<210> 24
<211> 20
<212> PRT
<213> Danio rerio

<400> 24

Ile Val Ser Asn Asp Lys Pro Arg Gln Ala Gly Pro Lys Val Asp Asn
1 5 10 15

Cys Ser Ile Met
20